

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

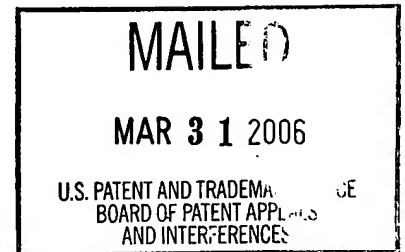
**UNITED STATES PATENT AND TRADEMARK OFFICE**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Ex parte GERHARD J. HAAS

Appeal No. 2005-1738  
Application No. 10/046,897

ON BRIEF



Before ELLIS, ADAMS, and GREEN, Administrative Patent Judges.

GREEN, Administrative Patent Judge.

**DECISION ON APPEAL**

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-8. Claim 1 is representative of the subject matter on appeal, and reads as follows:

1. A method of sanitizing the udders and teats of dairy cows, comprising washing or dipping said udders and teats with an aqueous solution an active ingredient of which is a hop compound in a concentration effective to kill pathogens on said udders and teats without causing trauma to said cows.

The examiner relies upon the following references:

Owades	4,170,638	Oct. 9, 1979
Barney et al. (Barney)	5,370,863	Dec. 6, 1994
Shibata et al. (Shibata) <sup>1</sup>	JP 172332	Jul. 7, 1989

Claims 1-8 stand rejected under 35 U.S.C. § 103(a) as being obvious over Shibata. In addition, claims 1-8 stand rejected under 35 U.S.C. § 103(a) as being obvious over the combination of Owades and Shibata, and claims 1-7 stand rejected under 35 U.S.C. § 103(a) over the combination of Barney with Shibata. After careful review of the record and consideration of the issues before us, we reverse all of the rejections of record.

#### DISCUSSION

Claims 1-8 stand rejected under 35 U.S.C. § 103(a) as being obvious over Shibata.

Shibata is cited for teaching “a method for treating mastitis in a cows using a water based extract of a solution comprising hops (*Humulus lupulus*).” Examiner’s Answer, page 3. The reference is also cited for teaching that the solution may be used in the form of a dispersion, and that the solution may be administered through the skin. According to the examiner, Shibata “teaches a method of killing pathogens by applying an aqueous hops solution to the skin of cows.” Id. at 4.

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<sup>1</sup> Translation dated September 26, 2003, a copy of which is attached to the Supplemental Request for Reconsideration.

The rejection concludes:

The reference does not specifically teach washing or dipping the udders and teats with this solution. However, a person of ordinary skill in the art would reasonably expect that the active hops containing solution should be administered to the skin at the site of the infection, specifically the skin of the udders and teats. Applying the active hops containing solution to the infected site would clearly involve a washing or dipping means of application. Thus, it is clearly within the skill of one of ordinary skill in the art to expand the teaching of [Shibata] of skin application of hops containing solution to include washing and dipping of the infected site. Therefore, an artisan of ordinary skill would be motivated to modify the teaching of [Shibata] to include washing and dipping the infected teats of cows to kill pathogens using the hops solution taught by the reference.

Id.

“A rejection based on section 103 clearly must rest on a factual basis, and these facts must be interpreted without hindsight reconstruction of the invention from the prior art. In making this evaluation, all facts must be considered. The Patent Office has the initial duty of supplying the factual basis for its rejection. It may not, because it may doubt that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis. To the extent the Patent Office rulings are so supported, there is no basis for resolving doubts against their correctness. Likewise, we may not resolve doubts in favor of the Patent Office determination when there are deficiencies in the record as to the necessary factual bases [sic, basis] supporting its legal conclusion of obviousness.” In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968) (emphasis in original).

Appellant argues that claim 1 requires washing or dipping the udders and teats of cows, and that is not disclosed by Shibata. See Appeal Brief, page 3. Appellant asserts that the examiner incorrectly relies on a single paragraph in the reference, specifically, the recitation in the translation that the active ingredients disclosed in the reference may be administered transdermally. See id. Appellant cites a certified translation of that paragraph, wherein the translator certifies that “transdermal[ ] is used interchangeably with transcutaneous. It means ‘through the skin.’” Id. at 4. We agree, and the rejection is reversed.

The Shibata translation teaches that a galenical, such as hops, may be used “to prevent and treat bovine mastitis caused by staphylococci, wherein the galenicals are mixed in feed.” Id. at paragraph 11;<sup>2</sup> see also paragraph 14. The reference teaches further that “[t]hese galenicals are used by administering them in an original powder form, in an extract solution form, or as an effective galenical constituent, or by adding these to animal feed, or by processing them into an agent form such as a liquid agent form, a dispersed agent form, a semi-solid agent form, a powder agent form, a solid form agent form, a leachate agent form, an injection agent form and so forth.” Id. at paragraph 38. Moreover, the examples are drawn to delivering the active agent in feed or drinking water.

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<sup>2</sup> Paragraph numbering was started a Section 3, “Detailed Explanation of the Invention,” with the paragraph starting with “The present invention pertains to an agent . . .” being numbered as paragraph 1.

Thus, the reference as read as a whole, does not teach or suggest directly applying the galenical, such as hops, to the teat or udder of a cow.

The examiner relies on paragraph 46 of Shibata, which teaches that “[t]he method of giving it is either oral or non-oral administration. As non-oral administration, intramuscular, intra stomach, transdermal, nasal and vein administration can be used.” The examiner asserts that

[t]he reference as translated states that the hops extract can be applied transdermally or to the skin to treat a pathogenic Staphylococcus aureus infection. The reference as translated does not specify that the transdermal administration is performed using a medicated patch or a syringe. In addition, a person of any degree of skill in the pharmaceutical art would appreciate that syringe injection is not transdermal administration. Transdermal administration means that the active substance is absorbed through the skin. Syringe injection pierces the skin; thus it is not administration through the skin. Thus, the appellants conjecture regarding the teaching of the reference to administer by injection or medicated patch is outside any suggestion of the reference’s teaching of transdermal administration.

Examiner’s Answer, pages 6-7 (emphasis in original).

The examiner, however, is ignoring paragraph 45, the paragraph directly before the relied upon paragraph, which states “[t]he amount to be administered varies in a range from 0.001 mg/body weight kg/day ~ 100 g/body weight kg/day in the original weight of galenicals. An amount of an agent for prevention is different from that of the agent for treatment, and generally the amount to be administered is larger for the latter.” Thus, that paragraph would not suggest to the ordinary artisan that the galenical is to be used to wash the teat or udder to prevent mastitis.

Finally, the examiner is not giving any weight to the Translation Certificate, attached as Exhibit B to the Appeal Brief, wherein the translator declares, under the penalty of perjury, that “[t]he word, transdermal, is used interchangeably with transcutaneous. It means ‘through the skin’[.] Examples of transdermal administration would be by syringe injection or the use of a medicated patch.” For the examiner to disregard that evidence on the conclusory basis that “[t]he appellant is reading more into the reference than is taught by the reference,” Examiner’s Answer, page 6, and as “conjecture,” *id.* at 7, is incorrect. The examiner provides no countervailing evidence, such as evidence that a person fluent in both Japanese and English would read “transdermal” in the way that the examiner asserts it should be read, to support her position. For that reason, and the reasons set forth above, we are compelled to reverse the rejection.

Claims 1-8 stand rejected under 35 U.S.C. § 103(a) as being obvious over the combination of Owades and Shibata.

Owades is cited for teaching the use of a topical aqueous hops extract to inhibit the growth of S. aureus. Examiner’s Answer, page 4. The examiner acknowledges that Owades “does not specifically teach using the hops extract to sanitize the teats and udders of cows.” *Id.* Shibata is cited for teaching that S. aureus is the causative agent of bovine mastitis.

The rejection concludes:

Therefore, since the hops extract of [Owades] is taught to be topically active against S. aureus, a person of ordinary skill in the

art would reasonably expect that the extract of [Owades] would be useful in sanitizing the teats and udders of cows. Thus, based on the teachings of the reference, a person of ordinary skill in the art would be motivated to use the hops extract of [Owades] to sanitize the teats and udders of cows.

[Owades] and [Shibata] taken together teach using a topical hops composition to sanitize the teats and udders of cows. The references do not specifically teach washing or dipping the teats and udders to apply the compositions. However, applying this active solution to the infected site would clearly involve washing or dipping as an obvious means for applying a transdermally active substance.

Id. at 4-5.

Appellant argues that Owades does not make up for the deficiencies of Shibata. See Appeal Brief, page 7. Owades, appellant contends, relates to the use of a hops extract in the preparation of deodorants for humans to inhibit the growth of S. aureus, and thus is non-analogous art. See id. Again, we agree, and the rejection is reversed.

The examiner asserts that the references are analogous, as they both Owades and Shibata deal with topical control of S. aureus. See Examiner's Answer, page 9. As noted above, however, Shibata does not relate to topical control of S. aureus, and we find that one of ordinary skill in the art interested in treating bovine mastitis, would not look to the deodorant art for a solution. See In re Wood, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979)(noting that in determining whether a reference is non-analogous art, first decide whether the reference is in the inventor's field of endeavor, and if not, determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved).

Claims 1-7 stand rejected under 35 U.S.C. § 103(a) as being obvious over the combination of Barney with Shibata.

Barney is cited for teaching that “various hops acids have topical antibacterial activity,” and that “tetrahydroisohumulone and other iso forms of humulone and lupulone function against S. aureus.” Examiner's Answer, page 5. The examiner states that “[Barney] does not specifically teach using the hops extract to sanitize the teats and udders of cows.” Id. The examiner relies on Shibata for teaching that S. aureus is the causative agent of bovine mastitis. See id.

The rejection concludes:

Therefore, since the hops extract of [Barney] is taught to be topically active against S. aureus, a person of ordinary skill in the art would reasonably expect that the hops acids of [Barney] would be useful in sanitizing the teats and udders of cows. Thus, based on the teachings of the references, a person of ordinary skill in the art would be motivated to use the hops extract of [Barney] to sanitize the teats and udders of cows.

[Barney] and [Shibata] taken together teach using a topical composition to sanitize the teats and udders of cows. The references do not specifically teach washing or dipping the teats and udders to apply the compositions. However, applying the active solution to the infected site would clearly involve washing or dipping as an obvious means for applying a transdermally active substance.

Id. at 5-6.

Appellant argues again that Barney and Shibata are non-analogous art, as Barney relates to the use of hops acids in dentrifices, and thus “one seeking to treat cattle would not look to the dentrifice art, except by pure hindsight.”

Appeal Brief, page 7. We agree yet again for the reasons set forth with respect



to the rejection over the combination of Owades and Shibata, and the rejection is reversed.

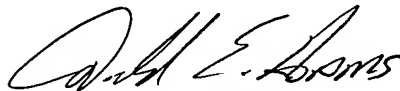
CONCLUSION

Because the examiner has failed to set forth a prima facie case of obviousness, all three rejections of record made under 35 U.S.C. § 103(a) are reversed.

REVERSED



Joan Ellis  
Administrative Patent Judge



Donald E. Adams  
Administrative Patent Judge



Lora M. Green  
Administrative Patent Judge

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